

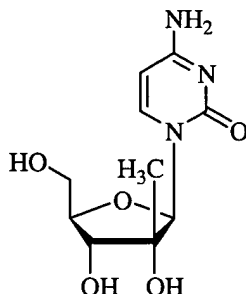
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

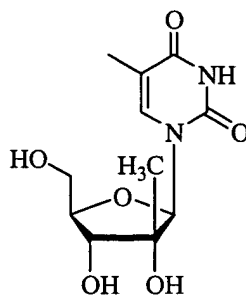
Claims 1-99 (cancelled)

Claim 100 (previously presented): A method for the treatment of a Hepatitis C virus infection in a host, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



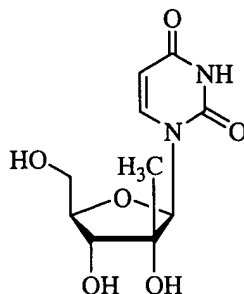
or a pharmaceutically acceptable salt or prodrug thereof, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 101 (previously presented): A method for the treatment of a Hepatitis C virus infection in a host, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



or a pharmaceutically acceptable salt or prodrug thereof, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 102 (previously presented): A method for the treatment of a Hepatitis C virus infection in a host, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



or a pharmaceutically acceptable salt or prodrug thereof, optionally in a pharmaceutically acceptable carrier or diluent.

Claims 103-129 (cancelled)

Claim 130 (previously presented): The method of any one of claims 100, 101, 102, or 140-152, wherein the pharmaceutically acceptable carrier is suitable for oral delivery.

Claim 131 (previously presented): The method of any one of claims 100, 101, 102, or 140-152, wherein the pharmaceutically acceptable carrier is suitable for intravenous delivery.

Claim 132 (previously presented): The method of any one of claims 100, 101, 102, or 140-152, wherein the pharmaceutically acceptable carrier is suitable for parenteral delivery.

Claim 133 (previously presented): The method of any one of claims 100, 101, 102, or 140-152, wherein the pharmaceutically acceptable carrier is suitable for intradermal delivery.

Claim 134 (previously presented): The method of any one of claims 100, 101, 102, or 140-152, wherein the pharmaceutically acceptable carrier is suitable for subcutaneous delivery.

Claim 135 (previously presented): The method of any one of claims 100, 101, 102, or 140-152, wherein the pharmaceutically acceptable carrier is suitable for topical delivery.

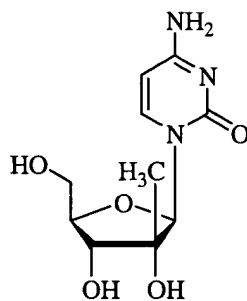
Claim 136 (currently amended): The method of claim 146 ~~any one of claims 100, 101, 102, or 140-152~~, wherein the compound is in the form of a dosage unit, such that said dosage unit contains 10 to 1500 mg of the compound.

Claim 137 (currently amended): The method of any one of claims 100, 101, 102, or 140-152
~~claim 136~~, wherein the compound is in the form of a dosage unit, such that said dosage
unit contains 10 to 1500 mg of the compound.

Claim 138 (currently amended): The method of any one of claims 100, 101, 102, or 140-152
~~claim 136~~, wherein the ~~dosage unit~~ compound is in the form of a dosage unit that is a
tablet or capsule.

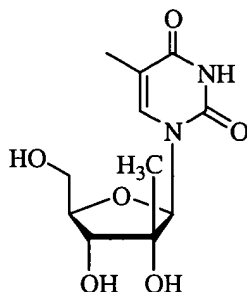
Claim 139 (previously presented): The method of any one of claims 100, 101, 102, or 146-152
wherein the host is a human.

Claim 140 (previously presented): A method for the treatment of a Hepatitis C virus infection
in a human, comprising administering an antivirally effective amount of a β -D nucleoside
compound of the structure:



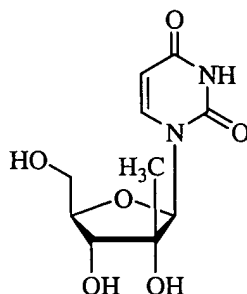
or a pharmaceutically acceptable salt or ester thereof.

Claim 141 (previously presented): A method for the treatment of a Hepatitis C virus infection
in a human, comprising administering an antivirally effective amount of a β -D nucleoside
compound of the structure:



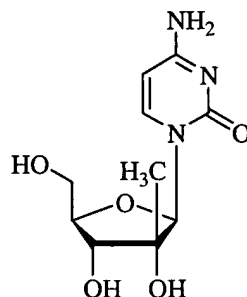
or a pharmaceutically acceptable salt or ester thereof.

Claim 142 (previously presented): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



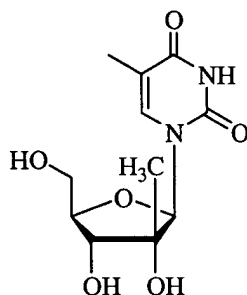
or a pharmaceutically acceptable salt or ester thereof.

Claim 143 (previously presented): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



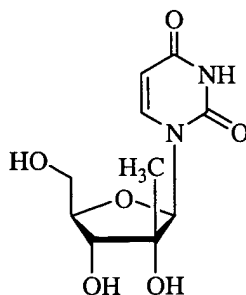
or a pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier.

Claim 144 (previously presented): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



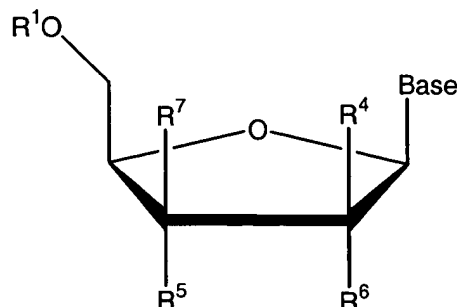
or a pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 145 (previously presented): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



or a pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 146 (currently amended): A method for the treatment of a hepatitis C virus infection in a host, comprising administering an anti-virally effective amount of a β -D nucleoside compound of formula:



or a pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier or diluent, wherein:

Base is a pyrimidine base;

R¹ is independently H; phosphate; stabilized phosphate prodrug; acyl; alkyl; sulfonate ester; and benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid, phosphate, and phosphonate; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or ~~other~~ a pharmaceutically acceptable leaving group which when administered *in vivo* ~~is capable of providing~~ provides a compound wherein R¹ is independently H or phosphate; and

R⁴ is alkyl, alkynyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), halogen, NO₂, NH₂, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)₂, or -N(acyl)₂; and

R⁵ and R⁶ are independently OR¹, hydroxy, alkyl, azido, cyano, alkenyl, alkynyl, Br, vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chlorine, bromine, iodine, NO₂, NH₂, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)₂, or -N(acyl)₂;

R⁷ is H, alkyl, chlorine, bromine, or iodine; and

X is O, S, SO₂, or CH₂.

Claim 147 (previously presented): The method of claim 146, wherein the pyrimidine base is selected from the group consisting of thymine, cytosine, 5-fluorocytosine, 5-methylcytosine, 6-aza-pyrimidine, including 6-azacytosine, 2- and/or 4-mercaptopyrimidine, uracil, 5-halo-uracil, C⁵-alkylpyrimidines, C⁵-benzylpyrimidines, C⁵-halopyrimidines, C⁵-vinyl-pyrimidine, C⁵-acetylenic pyrimidine, C⁵-acyl pyrimidine, C⁵-hydroxyalkyl purine, C⁵-amidopyrimidine, C⁵-cyanopyrimidine, C⁵-nitropyrimidine, or C⁵-aminopyrimidine.

Claim 148 (previously presented): The method of claim 146, wherein R⁴ is methyl, and R⁵ and R⁶ are hydroxyl.

Claim 149 (currently amended): The method of claim 146, wherein the compound is in the form of a dosage unit that is a tablet or capsule.

Claim 150 (currently amended): The method of claim 146, wherein the compound is at least 85% by weight free of the β -L-isomer in substantially pure form.

Claim 151 (previously presented): The method of claim 146, wherein the compound is at least 90% by weight free of the β -L-isomer.

Claim 152 (previously presented): The method of claim 146, wherein the compound is at least 95% by weight free of the β -L-isomer.

Claim 153 (previously presented): The method of claim 146, wherein R⁴ is alkyl.

Claim 154 (previously presented): The method of claim 146, wherein R⁵ is hydroxy.

Claim 155 (previously presented): The method of claim 146, wherein R⁶ is hydroxy.

Claim 156 (previously presented): The method of claim 146, wherein R⁷ is H.

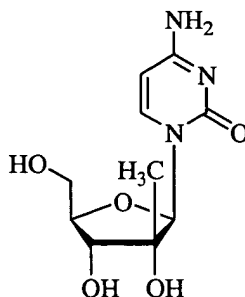
Claim 157 (previously presented): The method of any one of claims 100-102 or 140-145, wherein the compound is at least 90% by weight free of the β -L-isomer.

Claim 158 (previously presented): The method of any one of claims 100-102 or 140-145, wherein the compound is at least 95% by weight free of the β -L-isomer.

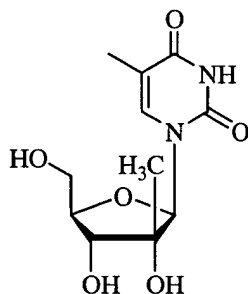
Claim 159 (currently amended): The method as in any one of claims 100-102 or 145-150, wherein the compound is at least 85% by weight free of the β -L-isomer in substantially pure form.

Claim 160 (new): The method of claim 146, wherein R¹ is H.

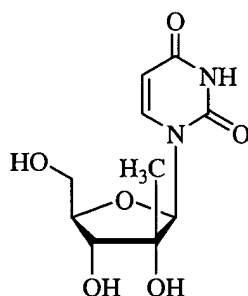
- Claim 161 (new): The method of claim 160, wherein R^4 is alkyl.
- Claim 162 (new): The method of claim 161, wherein R^5 is hydroxy.
- Claim 163 (new): The method of claim 162, wherein R^6 is hydroxy.
- Claim 164 (new): The method of claim 163, wherein R^7 is H.
- Claim 165 (new): The method of claim 146, wherein R^1 is an acyl.
- Claim 166 (new): The method of claim 165, wherein R^4 is alkyl.
- Claim 167 (new): The method of claim 166, wherein R^5 is hydroxy.
- Claim 168 (new): The method of claim 167, wherein R^6 is hydroxy.
- Claim 169 (new): The method of claim 168, wherein R^7 is H.
- Claim 170 (new): The method of claim 146, wherein R^1 is a phosphate.
- Claim 171 (new): The method of claim 170, wherein R^4 is alkyl.
- Claim 172 (new): The method of claim 171, wherein R^5 is hydroxy.
- Claim 173 (new): The method of claim 172, wherein R^6 is hydroxy.
- Claim 174 (new): The method of claim 173, wherein R^7 is H.
- Claim 175 (new): The method of claim 146, wherein R^1 is an amino acid.
- Claim 176 (new): The method of claim 175, wherein R^4 is alkyl.
- Claim 177 (new): The method of claim 176, wherein R^5 is hydroxy.
- Claim 178 (new): The method of claim 177, wherein R^6 is hydroxy.
- Claim 179 (new): The method of claim 178, wherein R^7 is H.
- Claim 180 (new): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



Claim 181 (new): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



Claim 182 (new): A method for the treatment of a Hepatitis C virus infection in a human, comprising administering an antivirally effective amount of a β -D nucleoside compound of the structure:



Claim 183 (new): A method for the treatment of a Hepatitis C virus infection in a host, comprising administering an antivirally effective amount of a β -D-2'-C-branched pyrimidine nucleoside.

Claim 184 (new): A method for the treatment of a Hepatitis C virus infection in a host, comprising administering an antivirally effective amount of a β -D-2'-C-branched pyrimidine ribonucleoside.

Claim 185 (new): The method of any one of claims 183-184, wherein the host is a human.